



Sasur Khaderi-2 River & Thithora Lake Revival Project in District Fatehpur (UP)

Under
MNREGS



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Location Map

Background

- District Fatehpur is situated on the *doab* of river Yamuna and Ganga .
- *Sasur Khaderi rivulet-2* lies in the central plain of Fatehpur , which had been *silted* and *encroached* for long and had almost *no flow* even during Monsoon, thereby *causing flood n water logging* and harming *paddy crop* and *people's life* in the vicinity area .
- Similarly *Thithora lake* at the head of *Sasur Khaderi -2* fell victim of encroachment and silting ,therby *loosing* its *hydrological , recreational ,ecological* and *historical value* .

Henceforth, it was decided to *rejuvenate* the *both water bodies* by the state administration under MNREGS last summer .

Reasons for Extinction

- *Drought conditions for long.* In such situation the rivers and lakes tend to shrink themselves.
- *Encroachment & Reduction of catchments areas* due to expansion of agriculture and other man made obstructions such as Roads etc.
- *Almost no feeding from ground water recharge* on account of excessive pumping.
- *Flattening of the slope and aggradation of river bed* owing to deposition of silt induced by construction of *ungated check-dams*.

Project Objectives

- Restore the original shape and flow of the 46km long river by making it *free of encroachment and dredging & desilting* its 38 km stretch .
- Save the adjoining villages from *water logging*.
- *Revive and Restore* the Thithaura lake.
- To use the lake water to maintain flow in the river during lean season by making *gated check-dams* at the Lake & river reaches.
- To *plant trees* around the lake and on river banks to prevent soil erosion and improve Environmental quality .

Project Formulation

- The project was prepared by the *Lower Ganga Canal Division of Irrigation department* .
- It included the revival of the lake (7.377 hectare) and 38 kms of the river length.
- The project was to be funded entirely from the *MNREGA* scheme.
- Based on level survey ,the quantities of earthwork were computed to be 1,46,065 cum and **11,05,455 cum** at lake site and river stretch respectively , thereby project costing Rs. 1208.30 lacs .

Plan modifications

- In Project formulation the *river* channel was treated as *canal* and accordingly the silt quantity was calculated to correct the *entire internal section* of 15m to 50m width, which gave out a huge quantity of **11,05,455 cum** earthwork .
- This quantity was neither economically nor practically feasible to execute, hence a *rethinking* was done . Since *RIVER IS NOT A CANAL*; river develops its regime on its own, based on discharge and velocity, the only need was to provide a minimum section with proper slope at bed level in entire length of the channel.
- So the desilting was planned in a *gunet* shape of only 1/3rd width, thereby reducing the quantity of earthwork to 1/4th and also the Project cost to around Rs 400.00 lacs .
- This modification made possible to manage the cost and time of the Project.

Challenges

- Resistance from peasants to free land from encroachments.
- The restoration plan was prepared in the month of *April 2013*, which was to be executed *before the onset of monsoon*. *May & June* being the *harvest n marriage* season for the locals , availability of labour was a *big problem*.
- In the month of May & June heat makes it very difficult to work, with *temperatures* constantly hovering around 42-45 degree celsius .
- The river bed was very *hard and parched*.

Implementation

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- Held *meetings* at all the *forty villages* of project area to convince the *Gram Pradhans* to support this mission and *motivate* labourers to come to the work .
- Organized meetings with social workers, media, college Principals, and local people, to *propagate* the objectives of the mission .
- Starting from modest 100, the number of work-force swelled to 4000 to 5000 every day as the project became favourite of the people
- *Arrangements* for the drinking water, shed, stay, food and emergency medicines like ORS & making on site payment to the labourers were made *at work-site*.

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- Vacant school buildings during May-June were utilized to provide *shelter* to the labours from far-off villages .
- It is noteworthy that no single person fell sick due to heat or dehydration during the entire period of the work. This was made possible only by taking *utmost care* of each and every person engaged in this task.
- *MNREGA guidelines* were *strictly followed* throughout the implementation of the Project . *No single complaint or criticism* was done by anybody including media .

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Work Scenes at the Lake & River site



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Labour working at Thithaura Lake Site.

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Labours Working at Thithaura Lake

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Earth Excavation at Sasur Khaderi-2 River

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AWAWARENESS CAMPAIGN

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Awareness Campaign By School Students

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RIVER

BEFORE



RIVER

AFTER



LAKE

BEFORE



LAKE

AFTER



IMPACT

Hydrological
Environmental
Ecological &
Socio-Economical

Hydrological :

- *Drainage of the catchment area improved considerably . No flooding and water logging even in the heavy monsoon rains last season .*
- *On July 16,2013 the discharge measured at chainage 44.00 (2 km downstream from Thithora Lake) was 689.95 cusecs which is a good sign of rejuvenation for an erstwhile almost dead river.*
- *The water stored in the lake was measured as 96000 cum on the same date.*
- *The rise in groundwater was noticed in the wells in vicinity of lake and situation is going to improve further once recharge structures such as check dams n recharge beds are built in the now flowing river.*

Environmental :

- The soil would have been rendered '**sodic & infertile**' if timely action was not taken
- The freed land from encroachments on the river banks and lake site is providing a huge scope for *plantation of trees* .
- 3500 *saplings* have been planted on the perimeter of lake in this monsoon season.
- *Dense seed sowing* of desi babool, jangle jalebi, shisham and khair have been done in three rows on each bank in 17 km stretch of the river & plantation shall be done once the soil stabilises in a year or two which is bound to give an *impetus* to the *environmental quality* of the region in near future .

Ecological :

- Once the lake is full of water round the year it is going to be a great habitat for *diverse flora and fauna* .
- The lake would also attract *migratory birds* from far off lands as has been the history when the lake used to be full of water years back.

Socio-Economical :

- *Mass Participation* of people for a cause of *water and soil conservation* .
- Generation of rural employment to the tune of *2,00,000 mandays* in just *45 days*.
- *No marooning* of villages even during heavy and incessant rains this year, thus requiring no relief measures which otherwise was a common thing in the past in such situation .
- A *good paddy crop* in about *250 hectares area*, due to less or no water logging .

Lessons Learnt

- Strong will, proper technical guidance , inter-departmental cooperation and people participation are **key** to success for such state-led projects.
- such projects are *most appropriate* for mass rural employment under MNREGS .
- A follow- up program for 3 to 5 yrs is must for sustainable success of water conservation projects .
- *Revival & Restoration of surface water bodies* are very crucial for reducing the dependence on ground water & improving the *health of soil and village economy* .

Suggestions

- **Stormwater management** is as crucial and important as *Wastewater management* . We lose crores and crores of rupees every year due to bad drainage either in built-up areas or in open fields .
- A clear *water policy* having a proper *balance* between the usage of surface water and ground water and matching programs n schemes are *must* for water conservation .
- As a policy, use of *surface water* should be *encouraged* and use of *ground water* should be *discouraged* .
- *Check dams* across the rivulets and drains must be *gated* to facilitate the flushing of silt and avoid aggradation .

Lastly

- The day is not far away when we will face the fury to *floods and drought* both, the same year, if timely attention is not paid to the *Revival, Conservation and Proper Utilisation* of **surface water bodies** .

और यूँ दो सूखी नदियों में आ गया पानी...

राज्य मुख्यालय | प्रमुख संवाददाता
फतेहपुर की ससुर और खदेड़ी नदियाँ...थिथौरा झील... बरसों सूखी रहीं। सूखी थीं लिहाजा गांवों में पानी की कमी हो गई। वहीं बारिश में आसपास के गांव भी पानीमय हो जाते। धान की खेती तो दूर की बात हो गई थी। लेकिन अब ऐसा नहीं रहा। अब ये दोनों नदियाँ अपने प्रवाह में बह रही हैं।

यह संभव हो पाया राज्य सरकार के निर्देशों, कुछ अधिकारियों के प्रयासों और महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार गारन्टी योजना (मनरेगा) की वजह से। यूपी के इस सफल प्रयास की चर्चा अब केन्द्र स्तर पर हो रही है। योजना के तहत इन दोनों नदियों में पानी लाने की कार्ययोजना तैयार की गई और अब इन्हें ससुर खदेड़ी-प्रथम तथा ससुर खदेड़ी-द्वितीय कहा जाता है।

यह थी योजना...

12.08 करोड़ रुपए की लागत से इसे पुनर्जीवित करने की योजना तैयार की गई। योजना के मुताबिक, 38 किलोमीटर के क्षेत्र की सिल्ट साफ कर नई खुदाई की गई। नदी के बहाव के लिए उपयुक्त गहराई तैयार की गई। नदी व झील के दोनों तरफ पौधारोपण कर उसके पाटी को मजबूत करने पर काम चल रहा है और मिट्टी का क्षरण रोका जा सके। इसके लिए पूरी नदी व झील को कई भागों में चिह्नित कर अलग-अलग प्रभारी अधिकारी बनाए गए। इसमें रोजना 1000 से 1500 श्रमिकों ने काम किया। झील से संबंधित कार्ययोजना में 38000 मानव दिवस सृजित हो चुके हैं तो नदी के लिए लगभग 96,900 मानव दिवसों का सृजन हो चुका है।



और अब ऐसा है गांव

जहां पानी के अभाव में धान की खेती नहीं हो सकती थी वहां इस बार अच्छी खेती दिख रही है। झील में जल के ठहराव के कारण स्थानीय जल स्तर में भी प्रभावी सुधार हुआ है। झील में इस वर्ष मानसून में लगभग 90,000 क्यूबिक मीटर पानी संरक्षित हुआ है।

यह एक ऐसा उदाहरण है जिससे प्रेरणा लेकर सूखी नदियों और झीलों को पुनर्जीवित किया जा सकता है। हमारे यूपी के इस प्रयास की पूरे देश में सराहना हो रही है।

— अरविंद सिंह गोप, ग्राम्य विकास राज्यमंत्री (स्वतंत्र प्रभार)

THANK YOU

BEFORE



AFTER



Benefits of a River Revival Project

- Freeing the land from encroachment.
- Improvement of drainage of the catchment area.
- Mitigation of incidence of flood.
- Reduction in water logging.
- Improvement in ground water recharge.
- Prevention of soil from turning 'sodic'.
- Reduction of dependence on ground water.
- Making availability of water for drinking and irrigation.
- Improvement of ecological & environmental scenario.